

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application

1. (Previously presented) A tablet that rapidly disintegrates in the oral cavity comprising a compressed blend of:

rapidly dispersing microgranules prepared by granulating a sugar alcohol or a saccharide or a mixture thereof having an average particle size less than about 30 microns, and a disintegrant, and

taste-masked microcapsules containing at least one drug, the microcapsule being prepared by granulating a pharmaceutically acceptable formulation comprising at least one drug in a therapeutically effective amount and at least one polymeric binder, wet milling the granulated mass, and microencapsulating the milled granules to provide microcapsules, wherein not less than 60% of the at least one drug from said tablet dissolves in about 60 minutes when dissolution tested using USP Apparatus 2 (paddle at 50 RPM, 900 mL of 0.1N HCl at 37°C).

2. (Currently amended) The tablet of claim 1 prepared by a process comprising the steps of:

(a) granulating a the pharmaceutically acceptable formulation comprising at least one drug in a therapeutically effective amount and at least one polymeric binder, and optionally a diluent(s) and a disintegrant, and

(b) wet milling the granulated mass using a size reduction mill to produce microgranules which resist breakage during coacervation for taste-masking and whose average particle size is not more than about 300 μm ,

(c) microencapsulating the microgranules to provide microcapsules with an average particle size of not more than about 400 μm ,

(d) separately granulating a sugar alcohol or a saccharide or a mixture thereof having an average particle size less than about 30 μm and a disintegrant to provide rapidly dispersing microgranules,

(e) blending the taste-masked microcapsules from step (c) and rapidly dispersing microgranules from step (d) optionally with additional pharmaceutical ingredients,
(f) compressing the blend from step (e) to form a tablet.

3. (Previously presented) The tablet of claim 1 which is produced by:

(a) granulating a powder mixture into rapidly dispersing microgranules with a fixed particle diameter, the powder mixture comprising a sugar alcohol, a saccharide or a combination thereof, each of which having an average particle diameter of not more than 30 μm ;

(b) granulating, wet milling and drying a pharmaceutically acceptable formulation comprising at least one drug with an average particle size of not more than about 50 μm , at least one binder, and optionally a diluent(s) and a disintegrant, said microgranule exhibiting not more than 15% fines (passing through 140 mesh screen) when tested in accordance with the procedure for friability test;

(c) encapsulating the microgranules of the at least one drug of step (b) by coacervation in cyclohexane comprising ethylcellulose,

(d) mixing the rapidly dispersing microgranules from step (a) and the microcapsules from step (c) and optionally other pharmaceutically acceptable ingredients and compressing the mixture into a predetermined shape.

4. (Currently amended) The tablet as set forth in claim 1 comprising rapidly dispersing microgranules comprising a sugar alcohol, a saccharide or a combination thereof, each of which has an average particle size of not more than about 30 μm , in the amount of about 30-70% by weight of the tablet; a taste-masked microcapsule having an average particle diameter of not more than about 50 400 μm in the amount of about 0.0 1-30% by weight of the tablet; a disintegrant in the amount of about 1.0-10% by weight of the tablet, and optionally other pharmaceutically acceptable ingredients, said tablet being compressed into a predetermined shape.

5. (Currently amended) The tablet of claim 4 wherein said rapidly dispersing microgranules comprises a sugar alcohol the or saccharide is selected from the group consisting of D-

mannitol, sorbitol, xylitol, maltitol, lactose and combinations thereof; and awherein the disintegrant is selected from the group consisting of crospovidone, sodium starch glycolate, crosslinked carboxymethyl cellulose, and low substituted hydroxypropyl cellulose and combinations thereof, each of which have an average particle diameter of not more than about 30 μ m.

6. (Previously presented) The tablet of claim 4 wherein said at least one drug is selected from the group consisting of H₂ antagonists, proton pump inhibitors, H₅ agonists, and selective histamine H₁ receptor antagonists, each of which having an average particle size of not more than about 50 μ m.

7. (Previously presented) The tablet of claim 6 wherein the disintegrant is selected from the group consisting of cross-linked polyvinylpyrrolidone (crospovidone), cross-linked carmellose of sodium, low substituted hydroxypropylcellulose and mixtures thereof.

8. (Previously presented) The tablet as set forth in claim 7 wherein the binder used for the granulation of the at least one drug is selected from the group consisting of polyvinylpyrrolidone (PVP), hydroxypropylcellulose (HPC), hydroxypropyl methylcellulose (HPMC) and modified starches.

9. (Original) The tablet as set forth in claim 8 wherein the sugar alcohol is D-mannitol.

10. (Original) The tablet as set forth in claim 9 wherein the saccharide is lactose.

11. (Previously presented) The tablet as set forth in claim 6 wherein the at least one drug is selected from the group consisting of ranitidine, cimetidine, famotidine, omeprazole, lansoprazole, sumatriptan, rezipriptan, zolmitriptan and cetrizine.

12. (Previously presented) The tablet as set forth in claim 11 wherein the at least one drug is sumatriptan.

13. (Original) The tablet as set forth in claim 12 wherein the disintegrant is crospovidone.
14. (Previously presented) The tablet as set forth in claim 13 wherein said polymeric binder is selected from the group consisting of polyvinylpyrrolidone (PVP), hydroxypropylcellulose (HPC), hydroxypropyl methylcellulose (HPMC) of viscosity of 100 cps or higher, Starch 1500, Starch 1551 and combinations thereof.
15. (Original) The tablet as set forth in claim 1 wherein the disintegration time in the buccal cavity of the tablet is not more than 120 seconds.
16. (Previously presented) A method for manufacturing a tablet that disintegrates in the oral cavity comprising the steps of:
 - (a) granulating a pharmaceutically acceptable formulation comprising at least one drug in a therapeutically effective amount and at least one polymeric binder, and optionally a diluent(s) and a disintegrant, and
 - (b) wet milling the granulated mass using a size reduction mill to produce granules which resist breakage during coacervation for taste-masking and whose average particle size is not more than 300 μm ,
 - (c) microencapsulating said microgranules to provide taste-masked microcapsules with an average particle size of not more than 400 μm ,
 - (d) separately granulating a sugar alcohol or a saccharide or a mixture thereof having an average particle size less than 30 μm and a disintegrant to provide rapidly dispersing microgranules,
 - (e) blending the taste-masked microcapsules from step (c) and rapidly dispersing microgranules from step (d) optionally with additional pharmaceutical ingredients,
 - (f) compressing the blend from step (e) to form a tablet, wherein not less than 60% of the drug from said tablet dissolves in about 60 minutes when dissolution tested using USP Apparatus 2 (paddle at 50 RPM, 900 mL of 0.1N HC1 at 37°C).
17. (Previously presented) The method of claim 16 wherein an intrabuccally rapidly disintegrating tablet is produced which comprises a sugar alcohol, a saccharide or a

combination thereof, each of which have an average particle size of not more than about 30 μm , in the amount of about 30-70% by weight of the tablet, an active ingredient having an average particle diameter of not more than about 50 μm in the amount of about 0.01-30% by weight of the tablet, a disintegrant in the amount of about 1.0-10% by weight of the tablet, and optionally other pharmaceutically acceptable ingredients.

18. (Original) The method of claim 17 wherein the step of compressing includes compressing the mixture into a predetermined shape using a tablet press and pre-lubricating the dies and punches prior to tablet compression.

19. (Original) The method of claim 18 wherein the blend is internally lubricated prior to its compression on a tablet press.

20. (Previously presented) The method of claim 17 wherein the sugar alcohol, the saccharide or the combination thereof, is selected from the group consisting of D-mannitol, sorbitol, xylitol, maltitol, and lactose and the disintegrant is selected from the group consisting of crospovidone, sodium starch glycolate, crosslinked carboxymethyl cellulose, and low substituted hydroxypropyl cellulose, each of which have an average particle diameter of not more than about 30 μm .

21. (Previously presented) The method of claim 20 wherein the at least one drug is selected from the group consisting of H₂ antagonists, proton pump inhibitors, 5-HT₁ receptor agonists, each of which have an average particle size of not more than 50 μm , and is granulated with one or more diluents and at least one polymeric binder.

22. (Previously presented) The method of claim 21 wherein the disintegrant is selected from the group consisting of cross-linked polyvinylpyrrolidone (crospovidone), cross-linked carmellose of sodium, low substituted hydroxypropyl cellulose and mixtures thereof.

23. (Previously presented) The method of claim 22 wherein said polymeric binder used for the granulation of the active is selected from the group consisting of polyvinylpyrrolidone

(PVP), hydroxypropylcellulose (HPC), hydroxypropyl methylcellulose (HPMC) of viscosity of 100 cps or higher, modified starches and mixtures thereof.

24. (Original) The method of claim 23 wherein the tablet disintegrates within 60 seconds in the buccal cavity, the sugar is D-mannitol having an average particle size of not more than about 30 μ m, the disintegrant is crospovidone, the active ingredient is ranitidine or sumatriptan having an average particle size of not more than about 50 μ m, and the polymeric binder is HPMC with a viscosity of 100 cps or higher, Starch 155 1 or Starch 1500.